

Aero Design Ltd.**Work Order Control Sheet**Work Order#: 2017-147 Date Opened: 31 August 2017Title: AssemblyAircraft OEM: Airbus HelicoptersAircraft Model: AS350Product Type: Bike RackProduct Model: BaseQuantity: 5 LH / 5 RH**Work Order Contents**

Work Order/Build Sheets (Procedures Provided)
Additional Work Sheets (Standard Practice)
Drawings (See List Below)
Parts Distribution Sheet
Sub Component Tags
Completed Certification (Original)
Time Sheet (R&D)
Notes

Initial or N/A

DM

N/A

DM

DM

N/A

JC

N/A

N/A

Build Sheet Contents

Tasks Initialled
Dual Inspections Initialled

Initial or N/A

JC

N/A

Drawing List

Drawing #	Rev #	Description	Initial or N/A
100215	0	Bike Rack Base Ass'y	DM

Traveller

Initial or N/A

Component Completion

As Instructed

Quantity Complete on This Work Order
Quantity Incomplete on This Work Order
Further Processing Required Before Release
Release to Stock as Components

4 / 4

N/A

N/A

N/A

Certification

Initial or N/A

Form One Completed
Serviceable (Green) Tag Completed
In Process (Yellow) Tag Completed
Unserviceable (Red) Tag Completed
Parts Placed in Stores for Distribution

N/A

N/A

JC

N/A

JC

Additional Documentation

Initial or N/A

Documentation of a minor change
Non-Conformance Report Required
Service Difficulty Report Required

N/A

N/A

N/A

Billing

Initial or N/A

Local (Aero Design)
Research and Development
Third Party

JC

N/A

N/A

Work performed by:

Print: D. MartynSign: [Signature]SCA: AD05Date: 20-Oct-17

ICC / Dual Inspection performed by:

Print: N/ASign: [Signature]SCA: Date:

Work Order closed by:

Print: J. ClarkeSign: [Signature]SCA: AD02Date: 18-Mar-18

Approved Manufacturing Facility 73-04

Form 20.0.03

Rev. Original 23 Sep 2014

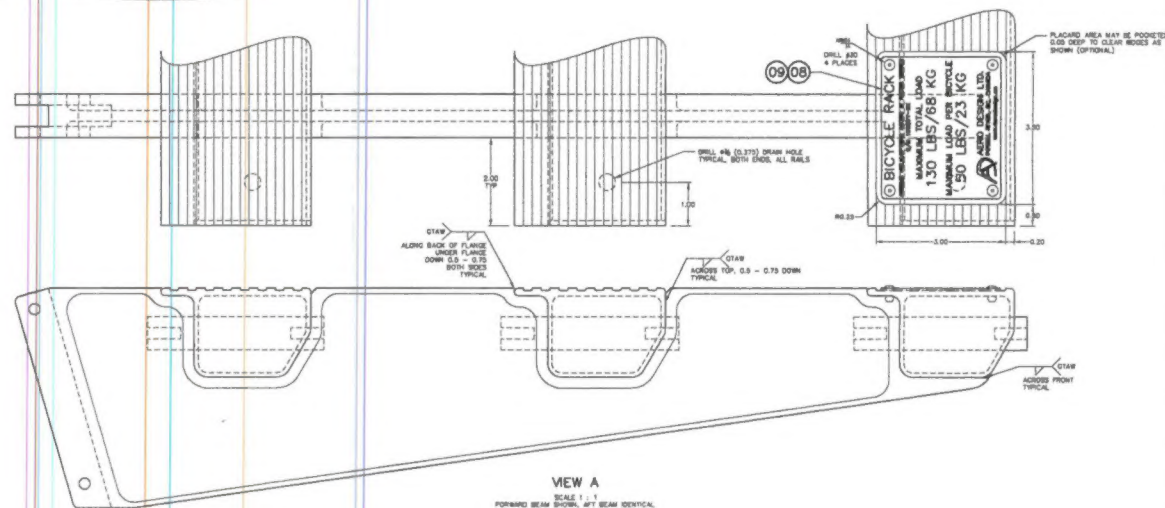
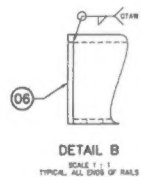
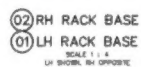
Aero Design

Parts Distribution Sheet

Bike Rack Base
4 ~~\$~~ LH / ⁴ ~~\$~~ RH
DRM WO# 2017-147

[illegible]

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		

[illegible]

IDENTIFICATION		APPROVALS		DATE		LIST OF MATERIALS
BASIC CODE REF. HEAD 152	DASH NO. FOR DASHED DASH NO. HEAD 152 DASH NO. HEAD 152	SEALER JACKSON	CLERK CLARK	3 JAN 2006	3 JAN 2006	AERO DESIGN LTD. PORTER BROS. INC. CANADA, WA. 913 TEL: 904.652.0779 www.aerodesign.ca
GROUPING = 0 SINGLE = 1 PAIR = 2 TO BE IMPROVED	DASH NO. FOR LENGTH	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES OF				AIRBUS HELICOPTERS AS350 & AS350 SERIES BICYCLE INSTALLATION RACK BASE FABRICATION
BASIC CODES BL=BASED BL=BASED/STANDARD BL=BASED/STANDARD BL=BASED/STANDARD BL=BASED/STANDARD	+ INITIAL NEW PART + REPLACE/REPLACE NEW + CHANGING NEW	DIMENSIONS IN INCHES K.001 ±0.010 K.002 ±0.005 K.003 ±0.003 K.004 ±0.002				SCALE 1" OF 1" A0 100215

2017-147

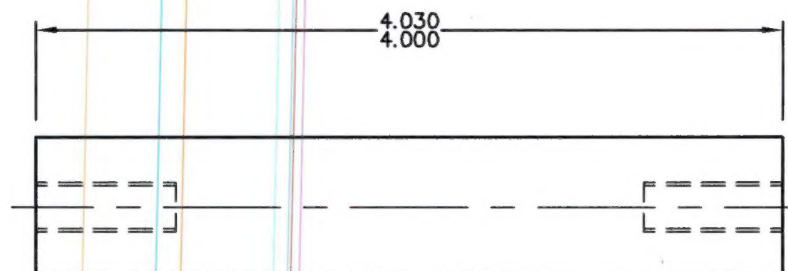
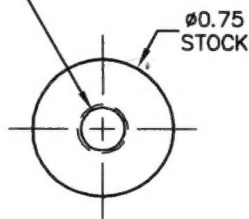
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REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		


NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.

TAP DRILL $1\frac{7}{8}$ (0.266) X 0.75 DEEP
TAP FOR 1/4-28 HELICOIL
INSTALL 3591-4CN375 HELICOIL
BOTH ENDS



01 RACK BUSHING

2	3591-4CN375	02	SELF-LOCKING HELICOIL			
	100226-01	01	RACK BUSHING	6061-T6 ALUMINUM	QQ-A-200/B	0.75 ROD
01	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
QTY	LIST OF MATERIALS					
			APPROVALS	DATE	 AERO DESIGN LTD. 9888A MALASPINA ROAD POWELL RIVER, BC, CANADA, V8A 0G3 TEL: 604.483.2376 www.aerodesign.ca	
			DRAWN: JEFF CLARKE	15 JUNE 2015		
			CHECKED: JASON REKVE	16 JUNE 2015		
			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS ANGLES X.XXX ±0.010 ±1/2° X.XX ±0.03 X.X ±0.1		AIRBUS HELICOPTERS AS350/AS355/EC130 BICYCLE RACK INSTALLATION RACK BUSHING FABRICATION	
			SCALE 1 : 1	DWG. SIZE	DWG. NO.	REV.
			SHEET 1 OF 1	A4	100226	0

Aero Design Ltd.
Component Fabrication

DRM 4 X LH BASE
DRM 4 X RH BASE

Work Order Number: 2017-147

100215-01 Bicycle Rack Base

Date: 31 Aug 2017

Notes:

Drilling speed to 320 RPM.

Rapid Tap cutting fluid or equivalent coolant required

Rail

Tasks	SCA
1. Record material PO below	
2. Cut 78230 step extrusion to 82.75" in length	
On each end, cut the side and bottom walls shorter by 1/8" leaving the tread rail full length IAW drawing 100215 Detail B	
3. Deburr one end on buffing wheel	
4. On the bottom wall, place a mark 7/8" from each end and drill 3/8" hole which will act as a drain and allow ventilation during the welding process	

N/A
JC

Manual Mill

5. While supporting the long end of the rail, clamp aft end (dependant on LH or RH) into the manual mill vice	
6. Using standard practices, zero off of the end and back of the part and set zero on the X and Y axis on the digital display	
7. Set table to drill locations IAW drawing 100215 Detail C and bore .75" holes	
8. Deburr edges and holes	

N/A
JC

Welding

9. Wipe parts with Acetone or equivalent solvent	AD-05
10. Place 100226-01 bushings in .75" holes and locate them IAW drawing 100215 Detail C	AD-05
11. Weld IAW drawing 100215	AD-05
12. Place cap 82720-04 on each end and weld IAW drawing 100215 Detail B	AD-05

Beam

13. Cut 1" x 8" 6061-T6 extruded bar to 24 7/8" in length.	
14. Install material in CNC mill ensuring RH edge overhangs for tool clearance	
15. Set material stop to ensure subsequent steps and parts return to the same location	
16. Load and run program 021 and 022	
17. Rotate part 180 degrees on plane	
18. Load and run program 021 and 022	
19. Separate parts by cutting along mark scribed during machining process	

N/A
JC

20.	Install 100230 jig plate into CNC straddling vices and lock down	
21.	Using a soft face hammer, tap the jig down to ensure it is seated	
22.	Zero table using standard practices	
23.	Mount separated part on jig using 1/4" bolts	
24.	Load and run program 023	
25.	Using vertical band saw, remove tooling lug at the outboard end	
26.	On manual mill, zero off the end of the part using standard machining practices	
27.	Using standard practices, machine surface area from which lug was removed	
28.	Inspect finish and dimensions of final part.	

N/A
JC

Rack Base Assembly

29.	Insert Helicoils in threaded bushings IAW drawing 100226	AD-05
30.	Install bike rack base beams into jig fixture	AD-05
31.	Install rails into beams	AD-05
32.	Weld IAW drawing 100215	AD-05
33.	Inspect finish and dimensions of final part.	AD-02
34.	Tag completed parts IAW Aero Design MPM.	AD-05

Material Purchase Order Number See PDS
 Batch Quantity 4 L/H 4 R/H